REMARKS / ARGUMENTS

Status of Claims

Claims 1-22 are pending in the application and stand rejected. Applicant has amended Claims 1, 8, 9, 13 and 20, leaving Claims 1-22 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §102(b), and 35 U.S.C. §103(a), have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Non-Statutory Double Patenting Rejection

Claim 1 stands provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 6, 7 of copending Application No. 10/985,633. The Examiner comments that although the conflicting claims are not identical, they allegedly are not patentably distinct from each other.

Applicant traverses this rejection for the following reasons.

The instant application has a file date of September 30, 2004.

Copending Application No. 10/985,633 has a file date of November 11, 2004.

In view of the foregoing, Applicant submits that copending Application No. 10/985,633 is not prior art to the instant application.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of this provisional rejection.

Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 13-22 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant traverses this rejection for the following reasons.

Applicant has amended Claims 13 and 20 to more particularly point out and distinctly claim the subject matter regarded as the invention, which now recite, inter alia, first and second separator plates and an alternative arrangement of MEAs and flow field members disposed between the separator plates.

Dependent claims inherit all of the limitations of the parent claim.

In view of the foregoing amendments, Applicant respectfully submits that the claimed subject matter is described in such a manner that reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, defined the claimed subject matter with a reasonable degree of particularity and distinctness, and therefore respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §112, second paragraph, which Applicant considers to be traversed.

Rejections Under 35 U.S.C. 8102(b)

Claims 1-3, 8-13, 16-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by Faita et al. (U.S. Patent No. 5,565,072, hereinafter Faita).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. V. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984) (emphasis added). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. Titanium Metals Corp. v. Banner, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

While Applicant believes that the original claim language, when read in context with the detailed description of the invention, is fully descriptive of "through channels" meaning through slots or holes that extend completely through the respective layer, Applicant has nonetheless, and in an effort to advance the subject case to allowance, amended Claims 1, 8, 9, 13 and 20, to be more descriptive of the subject matter regarded as the invention. Accordingly, Claims 1, 8, 9, 13 and 20, now recite, inter alia, "throughhole channels" and "through-holes." No new matter has been added by these amendments as antecedent support may be found in the specification as originally filed, such as at Paragraph [0028] for example.

At Paragraph [0028], Applicant specifically states that "As used herein, the term through channel refers to the presence of a slot or a hole that is made in the respective part (layer)." Accordingly, one skilled in the art, when reading the claimed invention in context with the detailed description of the invention, would appreciate that a "through channel" means a channel slot or hole that extends completely through the thickness of the layer.

At Paragraph [0037], Applicant discusses some of the advantages of the claimed laminated bipolar plate assembly having layers with through-holes that form the flow channels, thereby adding substantial significance to the fact that the claimed invention is a layered arrangement that is diffusion bonded to form a sealed laminated assembly.

The Examiner remarks that the limitations of diffusion bonded and laminated layers of the bipolar plate does not add patentable weight. Paper 20050902, page 3.

Applicant respectfully disagrees.

Only from the claimed invention is one apprised of the benefit of making a bipolar plate from a diffusion bonded laminated arrangement where the layers have through-hole channels, thereby providing for complex channeling in a compact and seal-tight configuration.

Contrary to the Examiner's remarks, Applicant submits that the limitations of bonded and laminated layers is substantial, and that such limitations provide a point of distinction over prior art directed to a single plate with flow grooves (not through-holes).

8602860115

Appln. No. 10/711,685 Docket No. 03-025/PES-0220

Also contrary to the Examiner's remarks (the Examiner remarks that the claimed layers in the bipolar plate are present as one layer in the final product, Paper 20050902, page 3), Applicant respectfully submits that the claimed layers are present as laminations in the final product, as evidenced by the bonding only being performed in defined regions. Furthermore, if Applicant were to accept the Examiner's position that the final product was a single layer, then it is unclear to Applicant how one skilled in the art would arrive at the through-hole structure of the middle layer if the entire plate is considered to be a single layer. This forced interpretation appears to be completely contrary to the detailed description of the invention.

Dependent claims inherit all of the limitations of the respective parent claim.

In comparing Faita with the instant invention, Applicant submits that Faita discloses grooved channels (3), and not through-hole channels as claimed. This understanding is supported by the Examiner's comments on page 5 of Paper 20050902, where the Examiner remarks that Faita "discloses a bipolar plate with a first and second side comprising grooves." As such, Applicant submits that Faita does not disclose a bipolar plate having first, second and third layers bonded together, with each layer having through-holes.

Accordingly, Applicant submits that Faita does not disclose all of the claimed elements arranged as in the claim, and absent anticipatory disclosure in Faita of each and every element of the claimed invention arranged as in the claim, Faita cannot be anticipatory.

In view of the foregoing, Applicant submits that Faita does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

Rejections Under 35 U.S.C. §103(a)

Claims 4, 5 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Faita and further in view of Wilson (U.S. Patent Application No. 2004/0197630, hereinafter Wilson).

Claims 6, 7 and 15 stand rejected under 35 U.S.C. §1039a) as being unpatentable over Faita and further in view of Toshihiro (JP-05-251097).

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention in such a manner as to perform as the claimed invention performs. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Claims 4-7, and 14-15 are dependent claims, and dependent claims inherit all of the limitations of the parent claim and any intervening claim.

In view of the foregoing discussion regarding the rejections under 35 U.S.C. §102, Applicant submits that Claims 4-7 and 14-15 are allowable for at least the reason that they now depend from allowable claims. In considering the References as a whole, Applicant submits that the secondary references fail to cure the deficiencies of Faita.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and are therefore wholly inadequate in their teaching of the claimed invention as a whole, fail to motivate one skilled in the art to do what the patent Applicant has done, fail to recognize a problem recognized and solved only by the present invention, fail to offer any reasonable expectation of success in combining the References to perform as the claimed invention performs, and discloses a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all

rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §112, second paragraph, 35 U.S.C. §102(b), and 35 U.S.C. §103(a), have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

The arguments and amendments presented herein are made for the purposes of better defining the invention, rather than to overcome the rejections for patentability. The claims have not been amended to overcome the prior art and therefore, no presumption should attach that either the claims have been narrowed over those earlier presented, or that subject matter or equivalents thereof to which the Applicant is entitled has been surrendered. Allowance of the claims is respectfully requested in view of the above remarks. Moreover, no amendments as presented after the scope of the claimed invention and therefore cannot necessitate a new grounds rejection.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 06-1130.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP

Applicant's Attorneys

~y`—**/**

David Amold

Registration No: 48,894 Customer No. 23462

Address:

55 Griffin Road South, Bloomfield, Connecticut 06002

Telephone:

(860) 286-2929

Fax:

(860) 286-0115